AJA ATC2200 sputtering system, overview

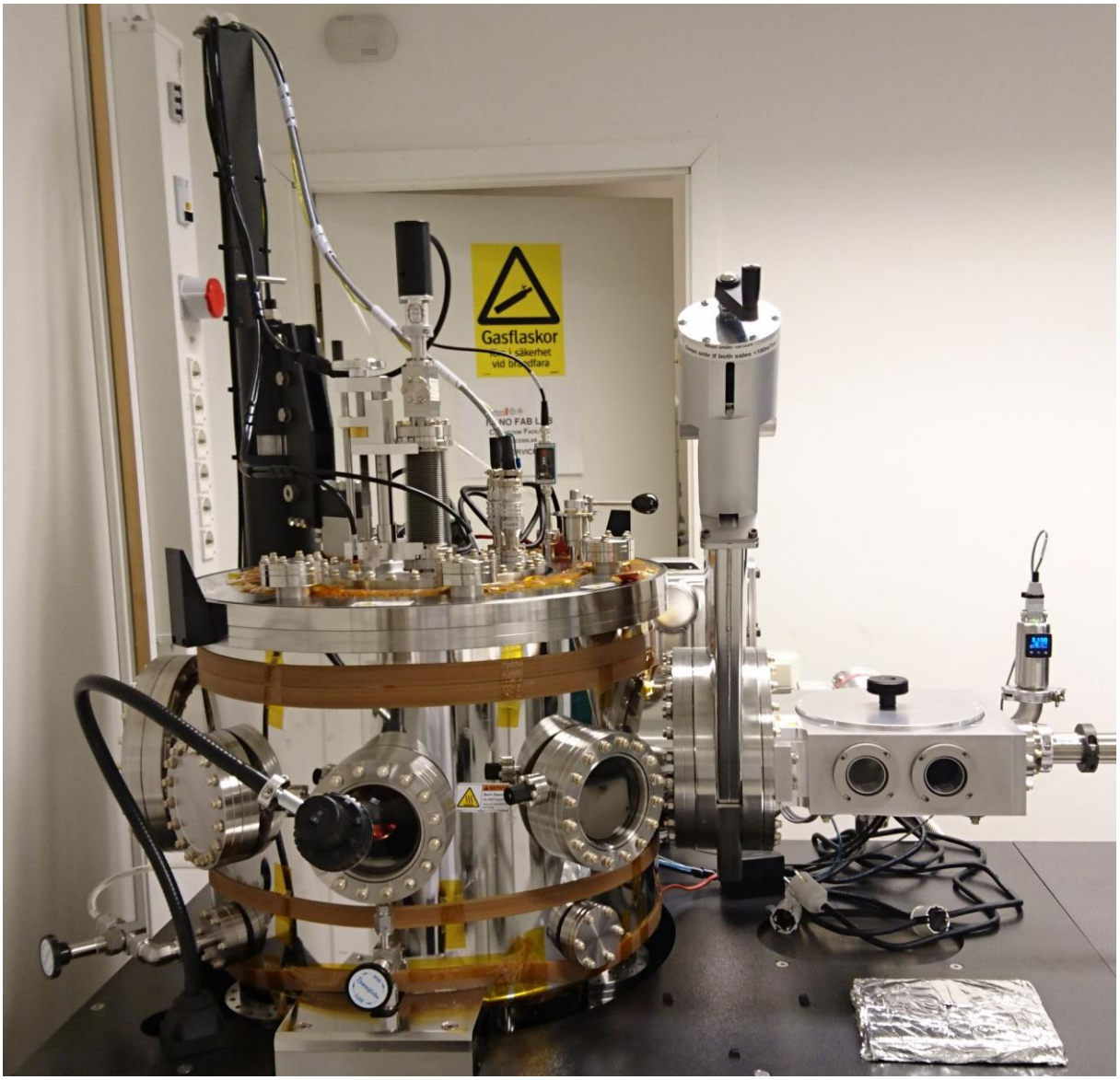
Overview of the system. To the left is the chamber, with the loadlock in the middle, and the electronics rack to the right.

From top to bottom and left to right:

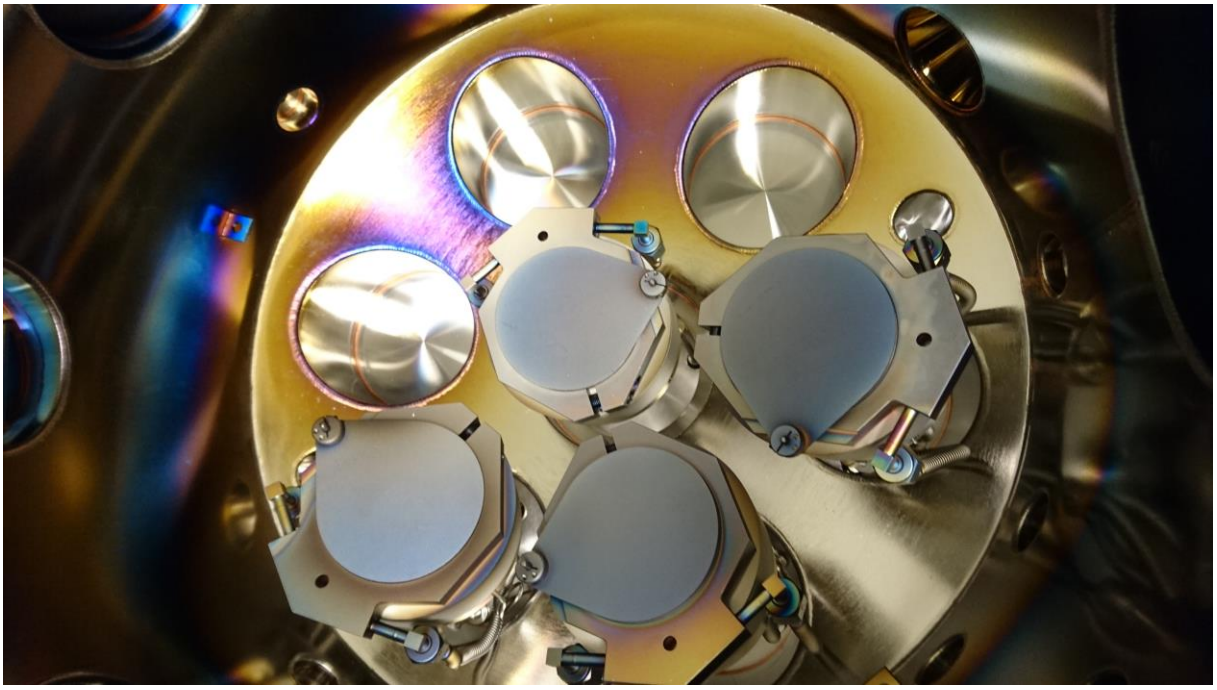
- Mains ON/OFF with Emergency shut off switch, water interlock check, and vacuum pumps general switch.
- Control for heating halogen lamps, main chamber and load-lock separate switches.
- Vacuum gauges readout and power supply, controller of the motorised valve for pressure adjustement in the main chamber.
- Thickness/rate cristal monitor.
- RF sputter power supply.
- 3X DC sputter power supply.

From top to bottom and left to right:

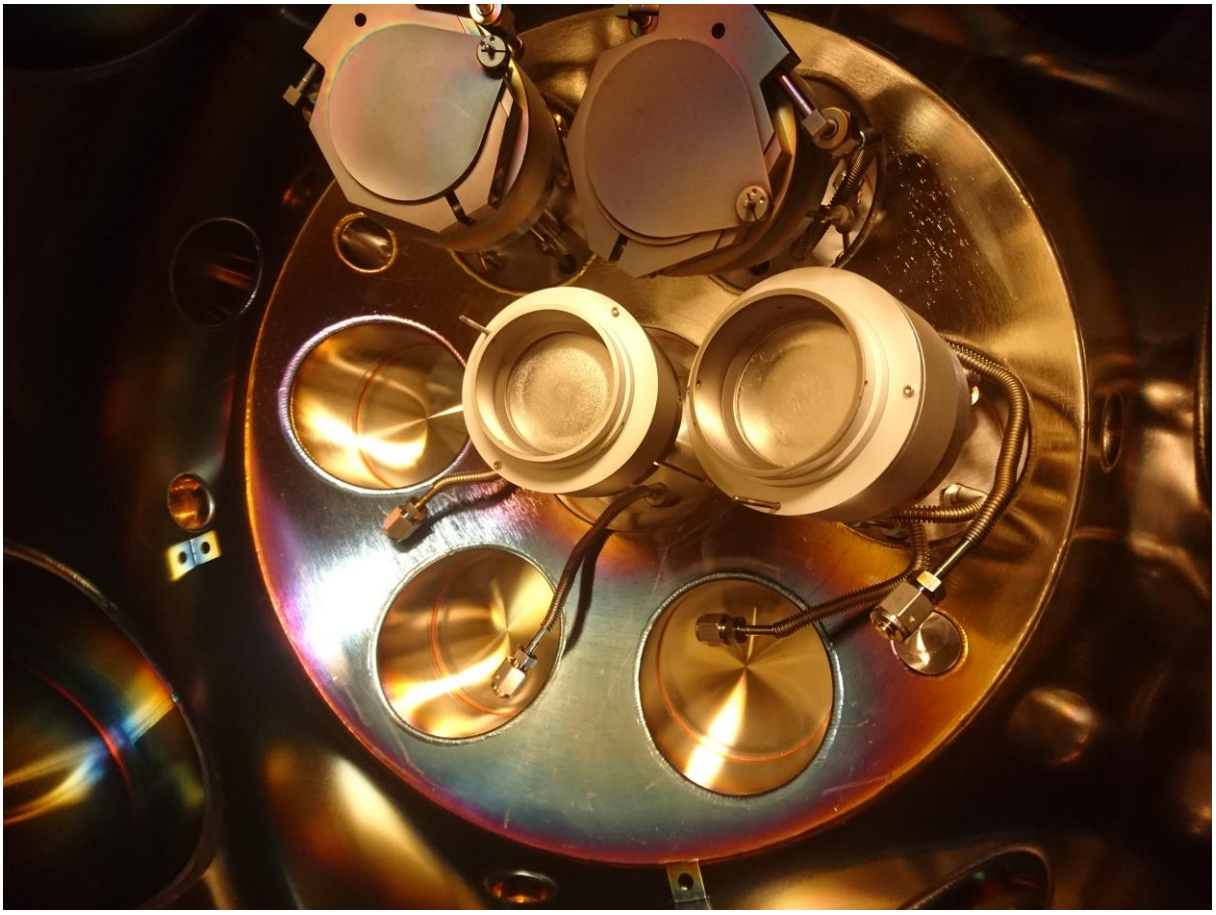
- Control laptop
- Substrate rotation control, Cryopump temperature display, load-lock turbo pump controls
- RF auto-tuner and RF power supply for substrate bias



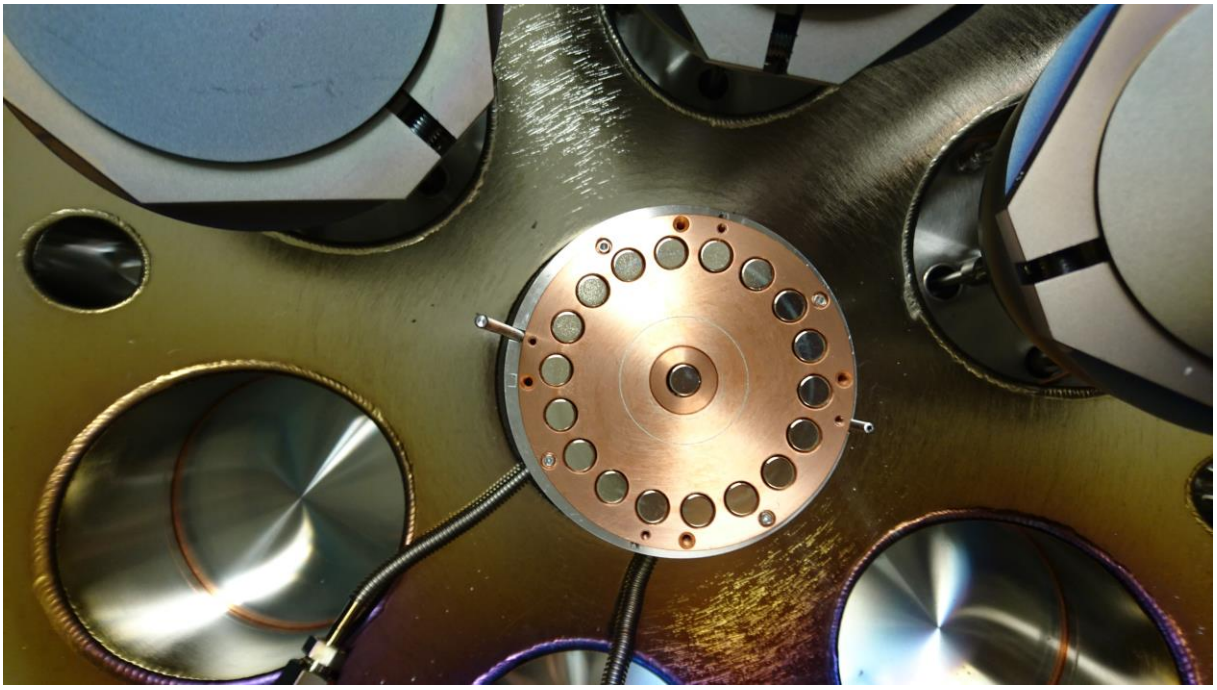
Main chamber, transfrer valve and load-lock.



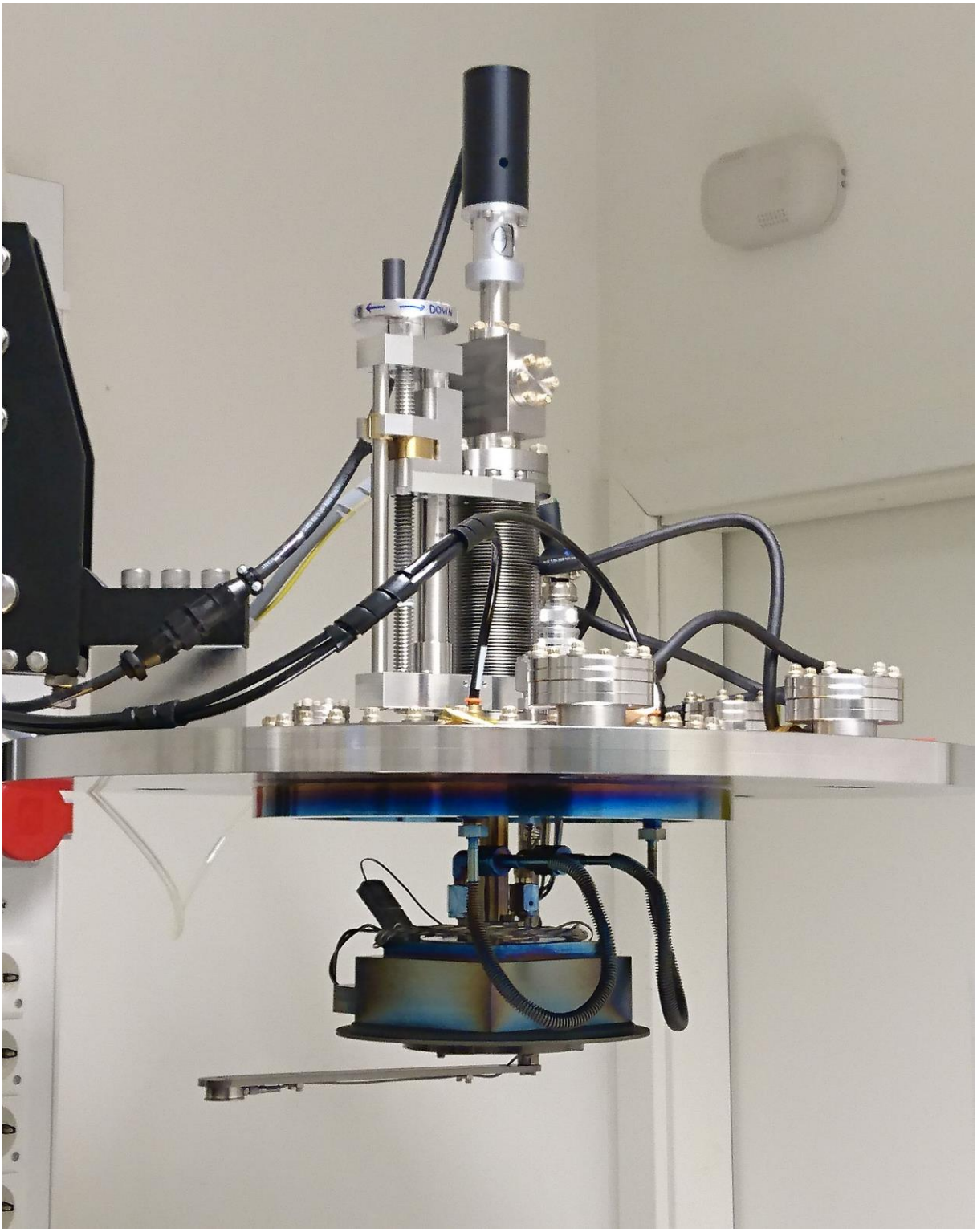
The four sputtering guns, shutter closed and cooling rings installed.



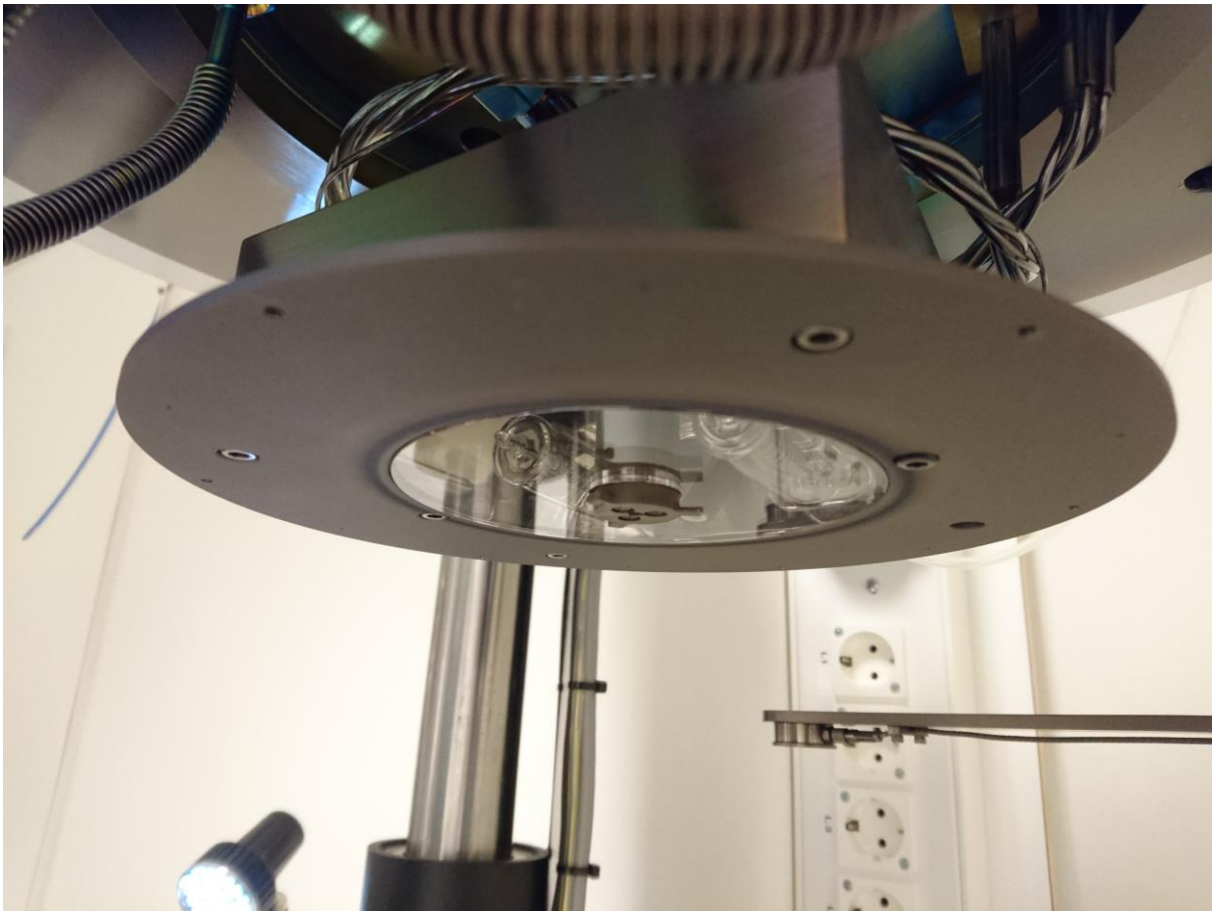
The Nb and Ti guns, cooling rings and shutters unmounted.



Central gun with the target removed. One can see the ring of magnets and center magnet.



Substrate holder and quartz cristal arm, as seen when the lid of the chamber is lifted up.



Substrate holder and quartz cristal arm, as seen when the lid of the chamber is lifted up. Here the substrate holder is not mounted. NEVER sputter when the substrate holder is not placed, as it will result in coating the window of the halogen lamp.